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10/008,399	12/06/2001	Arturo A. Rodriguez	A-7492	2909
5642	7590	01/23/2009	EXAMINER	
SCIENTIFIC-ATLANTA, INC.			SALCE, JASON P	
INTELLECTUAL PROPERTY DEPARTMENT				
5030 SUGARLOAF PARKWAY			ART UNIT	PAPER NUMBER
LAWRENCEVILLE, GA 30044			2421	
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			01/23/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

Office Action Summary	Application No.	Applicant(s)	
	10/008,399	RODRIGUEZ, ARTURO A.	
	Examiner	Art Unit	
	Jason P. Salce	2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 04 November 2008.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16,20-25,27-65,69-97 and 112-115 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-16, 20-25, 27-65, 69-97 and 112-115 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/04/2008.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/04/2008 has been entered.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 11/04/2009 was filed after the mailing date of the Advisory Action on 08/25/2008. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

Applicant's arguments filed 11/04/2008 have been fully considered but they are not persuasive.

Applicant has amended the claims to introduce weighted scores, however, Ukai still reads on the amended claims (**see updated rejection below**).

Applicant argues that Ukai fails to teach that each element or alleged parameter in Figure 3 of Ukai does not have an associated user preference.

The examiner disagrees and notes that the claim limitation, "determining a user preference for each of the plurality of viewing parameters" is broad and does not require that every single viewing parameter in the television system of Ukai contain a user preference. The examiner is interpreting the limitation "viewing parameters" as the total view time period 404 in Figure 4, wherein the view time period represents how interested the user in the television program based on how long the user watches the television program. Applicant has interpreted viewing parameters on the table disclosed in Figure 3, however, as clearly stated in the Office Action on Page 3, viewing parameters are being interpreted as the view time period 404 in Figure 4. Therefore, Ukai clearly teaches determining a user preference (**view time period 404 in Figure 4**) for each of the plurality of viewing parameters (**each program name in Figure 4**).

Applicant also argues that Ukai fails to teach a digital home communication terminal.

The examiner disagrees and notes Column 4, Lines 8-35 (**specifically Column 4, Lines 28-33**) for teaching the TV receiving device can record television programs in memory means that includes an optical disk (**which is clearly a digital signal**), therefore Ukai clearly teaches a digital home communications terminal. Further, Ukai teaches that the TV receiving device can receive digital signals from a digital broadcasting system (**see Column 15, Lines 4-5**), therefore Ukai clearly teaches that

the TV receiving device is a digital home communication terminal, wherein the communication is evidenced by the person interacting with the TV receiving device through a remote control.

Applicant also argues that Ukai fails to teach using statistical analysis.

The examiner disagrees and notes that Ukai clearly teaches performing statistical analysis on multiple program view scores in order to determine a mean view score (**see Figure 5 and Column 5, 40-55**). The examiner notes that a mean score is a classic calculation used in the art of statistics (**see <http://www.statistics.com/resources/glossary/m/meanscore.php>**).

Applicant also argues that Ukai fails to teach the use of artificial intelligence technology. The examiner disagrees and notes that Ukai clearly teaches the use of artificial intelligence by the calculations performed in Figures 5-7 and 12-16 for the TV receiving device automatically deciding a user's favorite programs based on the view scores recorded by the system. The examiner notes that by automatically making decisions for the user in regards to his/her preferred programming, Ukai clearly teaches the use of artificial intelligence (**see <http://www.merriam-webster.com/dictionary/artificial+intelligence>**).

Applicant also argues that Ukai fails to teach a non-volatile memory.

The examiner disagrees and notes that the storage means 108 stores the TV program selection support program 200 in a memory area that cannot be overwritten (**see Column 4, Lines 21-33**), otherwise if the program was corrupted by being overwritten, the system could not function. Since Ukai teaches memory devices that cannot be overwritten (**such as an optical disk**), Ukai clearly teaches a non-volatile memory device.

In regards to claims 25 and 74, the examiner has taken Official Notice to the fact that preference data can be stored at a headend. Applicant has traversed this rejection.

Alexander et al. (U.S. Patent No. 6,177,931) teaches that user preferences can be transmitted back to a headend for further analysis (**Column 29, Lines 12-36**).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the TV analysis process, as taught by Ukai, to perform the analysis at the headend, as taught by Alexander, for the purpose of providing a lower cost TV receiving device that contains a cheaper processor and memory devices since there would be no need for processor intensive tasks (constantly processing and updating user preferences).

In regards to claims 46-48 and 95-97, the examiner has taken Official Notice to the fact that parental control programs commonly reside on television receiver devices.

Block et al. (U.S. Patent No. 6,675,384) teaches a parental control program resident on a television receiver device (**see elements 100 and 110 in Figure 1**).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the TV receiving device, as taught by Ukai, to contain a parental control program, as taught by Alexander, for the purpose of providing a means for users to gain by being able to make informed choices (**see Column 2, Lines 42-49 of Block**).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims, 1-16, 20-24, 27-45, 49-65, 69-73, 75-94 and 112-115 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Ukai et al. (U.S. Patent No. 7,096,486).

Referring to claim 1, Ukai discloses tracking a plurality of viewing parameters corresponding to services that are provided to a user (**see Figure 3 and Column 5, Lines 11-28 for storing/tracking a plurality of viewing parameters (program name, date and time, genre, time period, language and preference measure)** corresponding to services that are provided to the user (**note that a language and**

genre and the time a program is broadcasted is representative of a television service provided to the user).

Ukai also discloses determining a user preference for each of the plurality of viewing parameters (see Figure 4 and Column 5, Lines 29-39 for the system determining a view time period which represents a user preference that is determined by monitoring how long a user watches a program and recording that time in memory).

Ukai also discloses tracking the user preferences by assigning a score to each of the plurality of viewing parameters (see Figure 5 and Column 5, Lines 40-55 for assigning a view score to each program's user preferences being tracked).

Ukai also discloses weighting the scores (see Figure 5 and Column 5, Lines 44-55 for weighting the view scores by calculating a program view measure, which represents a weight that is adjusted each time a view score is added to the database (i.e. the program was viewed)).

Ukai also discloses determining an overall user preference score for the plurality of tracked viewing parameters based on a linear combination of weighted scores associated with each of the plurality of tracked viewing parameters for the user (see Figure 7 and Column 6, Lines 21-52 for the system calculating a preference measure conversion table 700 for estimating degrees of viewer's preference for programs to be broadcasted, where the system further calculates a weighted program view measure 703 which is determined using the program measure view measure 504). *The examiner further notes that the total number of programs*

represents a weighted linear combination because if one user a program 19 times and a second user watches a program 10 times, this represents a different weight in regards to the interest the user has in the program.

Ukai also discloses receiving user input requesting television functionality (see **Figure 6 and Column 6, Lines 2-7 for receiving a user input everytime the user inputs a request to view a program**).

Ukai also discloses providing the user with a result that is responsive to the user input and the overall user preference score (see **Figure 17 and Column 15, Lines 21-23 for displaying an EPG that displayed programs that are preferred by the user based on the preferences scores determined by the scoring of the programs, where the result is shown by graphic 1704**).

Referring to claim 2, Ukai discloses that the user preference is determined based on a duration that service characterized by one or more of the plurality of viewing parameters is presented to the user (see **Figures 4 and 6 for determining the user's preference by using a duration (view time period 404) that a program has been viewed**).

Referring to claim 3, Ukai discloses that the user preference is determined based on a frequency that a service characterized by one or more of the plurality of viewing parameters is presented to the user (see **Figure 6 for determining a user preference 604 based on a number of programs 603 viewed**).

Referring to claim 4, see the rejection of claims 2-3.

Referring to claim 5, Ukai discloses that the user preference is for a service (**see the rejection of claim 1 and note that the service is the broadcasting of television program for viewer selection**).

Referring to claim 6, Ukai discloses that the user preference conflicts with another user preference (**see Figure 3 and note that the two programs in table 300 are show at two overlapping/conflicting time periods in table entries 303**).

Referring to claim 7, Ukai discloses that the user preference is defined by the user (**see Figure 4 for the user preference being determined by how long the user watches a television program**).

Referring to claim 8, Ukai discloses that the user preference is determined by tracking series that are provided by a digital home communication terminal (**see Figure 1 and Column 4, Lines 8-35 for the user preferences being tracked by a television receiver**).

Referring to claim 9, Ukai discloses that the result is only provided if a preference mode is activated (**see Column 4, Lines 21-53 for determining user**

preferences only when a user enters a program to be viewed, thereby activating the preference determination process).

Referring to claims 10-12, see the rejection of claims 1 and 9.

Referring to claim 13, Ukai discloses that the user input indicates a preference against one or more of the plurality of viewing parameters (**see Figure 5 for the user viewing a program for a first time and second time, thereby showing entering a first time against a second time).**

Referring to claim 14, see the rejection of claim 13 and further note that the user can selection multiple programs (**see Figure 5 and Column 5, Lines 50-55 for continually updating the view score table 500).**

Referring to claim 15, Ukai discloses that a preference tracking database is used to keep track of the user preference (**see Figure 5 and Column 5, Lines 50-55 for updating the view score table 500).**

Referring to claim 16, see the rejection of claim 15 and note that the database keeps track of more than one user preference.

Referring to claims 20-22, Ukai discloses that the overall user preference score for the plurality of tracked viewing parameters changes over time, is revised using statistical analysis and determined using artificial intelligence (**see Figure 5 and Column 5, Lines 40-55 for the view scores being updated and using the data stored in tables 500-700 to artificially determine what programs a viewer may or may not enjoy watching, therefore since the system (not the user) determines what programs to present to the viewer, an artificial intelligence system is taught**). Further note that since weighted view measures and mean score calculations are determined (**see the rejection of claim 1**), Ukai clearly teaches the use of statistical analysis.

Referring to claim 23, Ukai discloses that the data identifying a user preference is stored in non-volatile memory (**see storage means 108 in Figure 1**).

Referring to claim 24, Ukai discloses that data identifying the user preference is stored within a digital home communication terminal (**see the rejection of claim 23**).

Referring to claims 27-35, see Figures 3 and 6 and Column 5, Lines 11-28 and Column 5, Line 56 through Column 6, Line 20 and the rejection of claim 1.

Referring to claims 36-41, see Figures 17, 21, 25-26, Column 14, Line 45 through 18, Line 7.

Referring to claims 42-45, see Figure 12 and Column 9, Line 21 through Column 10, Line 50.

Referring to claims 49-65, 69-73 and 75-94, see the rejection of claims 1-16, 20-24 and 27-45, respectively.

Referring to claim 112, Ukai discloses initially estimating weights for weighting the scores using artificial intelligence technology (**see the rejection of claim 22 for how the system applies artificial intelligence technology and Column 5, Lines 44-55 for calculating an initial weight (1.0) when a program in a series of programs is viewed for the first time**).

Referring to claim 113, Ukai discloses refining the weights for weighting the scores using artificial intelligence technology (**see the rejection of claim 22 for how the system applies artificial intelligence technology and Column 5, Lines 44-55 for calculating an updated weight (Figure 5) when a program in a series of programs is viewed for a second time**).

Referring to claims 114-115, see the rejection of claims 112-113, respectively.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25, 46-48, 74 and 95-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ukai et al. (U.S. Patent No. 7,096,486).

Referring to claim 25, Ukai discloses all of the limitations of claim 1, but fails to teach that the preference data is stored at the headend.

The examiner takes Official Notice that preference data can be stored at a headend.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the program selection system, as taught by Ukai, using preference data stored at a headend, as taught by the examiner's Official Notice, for the purpose of requiring less memory storage by a client device, therefore being able to provide cheaper client devices to consumers.

Referring to claims 46-48, Ukai discloses all of the claim limitations in claims 45-47, respectively, but fails to teach a conditional access system that will not tune to a program selection unless a user enters his/her PIN/password.

The examiner takes Official Notice that parental control programs commonly reside on television receiver devices.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the program selection system, as taught by Ukai, using the conditional access/parental control system, as taught by the examiner's Official Notice, for the purpose of restricting children from watching objectionable television content.

Referring to claim 74, see the rejection of claim 25.

Referring to claims 95-97, see the rejection of claims 46-48, respectively.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason P Salce/
Primary Examiner, Art Unit 2421

Jason P Salce
Primary Examiner
Art Unit 2421

January 20, 2009